

Plan For Combat Of Pollution On Muskokas Is Explained to Area Representatives

Pollution abatement on the Muskoka lakes was given intensive consideration at a meeting, early this month, between personnel of the Ontario Water Resources Commission, the Department of Lands and Forests, and the Muskoka Lakes Association.

The Muskoka Lakes Association is a voluntary organization, formed to ensure protection of the lakes from adverse developments. Members of the association have been gathering data, with the assistance of OWRC, to illustrate the bacteriological conditions in some areas of the lakes and to "show people

what they can do about the problem."

High priority was given at the meeting to a discussion of OWRC's forthcoming summer program on the lakes. The area has been chosen by the Commission as the site for a special study on nutrient enrichment.

Commission personnel explained to the Muskoka representatives the significance of the enrichment problem and detailed the investigations to be conducted this summer in Lake Muskoka, Lake Rosseau, and Lake Joseph. The studies will concentrate on "budgeting the nutrients"—determining sources and quantity—and

calculating the factors responsible for algal growth.

It is anticipated that the entire program will establish the relationship between nutrient enrichment and algal development and determine what controls on municipal effluent and septic tank discharges will be necessary.

OWRC technical and scientific staff indicated at the meeting that they feel the program has "a high probability of success."

The Commission first became involved in investigations of the nutrient problem in the lakes when residents in some areas complained of the build-up of algae.



EQUIPMENT such as dredge-scoop above, operated from boat, will be used in summer program on Muskokas. The scoop collects soil from the bottom which can later be analyzed for nutrient content.

Cheap But Effective

Silicate Treatment Developed To End 'Excess Iron' Problems

A recently developed technique may signal an end to the frustrations of many Ontario municipalities saddled with problems caused by marginal quantities of excess iron in their water supply.

BLOOD-LIKE TASTE

Nuisances experienced as a result of the presence of iron

include the staining of sinks and clothes and, often, a blood-like taste in the water.

INTRODUCED AT MARKHAM

The new treatment, developed by the Ontario Water Resources Commission, consists of supplementing the natural silicate content of the water by the introduction of minute quantities of sodium silicate. This additional silicate combines with the iron

to maintain it in a soluble state, blocking formation of an iron "sludge."

The silicate treatment was initiated at the water treatment plant in the town of Markham in February after four months of study and trials. Introduction of chlorination at Markham last year had resulted in the formation of unprecedented amounts of the "sludge" in the mains.

CHEAP SOLUTION

Added at the point of chlorination, the silicate has provided a cheap but effective remedy to the town's iron problem. It is estimated that installation of a plant for removal of iron from the water would have cost residents about \$175,000. Cost of the silicate additive will be about \$1,200 per year.

OWRC is currently conducting studies of the iron nuisance in other municipalities.



CHEMICAL ENGINEER Jim Dart of OWRC carefully tabulates results of treatment in continuing study.



AT MARKHAM Water Treatment Plant, Dave McVie, manager of the Markham Public Utilities Commission and superintendent, Arnold Thomas, calibrate volume of silicate to be added to water supply. Markham was first to use silicate treatment.

June Date For Industrial Waste Conference

Four weeks to go to the 16th annual Industrial Waste Conference!

It is anticipated that this year's conference — running from June 15-18 — will be the biggest yet. Last year's conference attracted 300 delegates.

Setting for the meeting will, once again, be Niagara Falls. All technical and social sessions will take place at the Sheraton-Brock while accommodation will

be next door at the Sheraton-Foxhead.

Subjects to be discussed during the three-day program include inorganic and solid wastes, geologic and hydrologic studies, metal working wastes, research studies and food and animal wastes.

Papers will be delivered by both Canadian and American specialists who are experts in their respective fields.

Special family plans have been arranged by OWRC's conference committee, which sponsors the Industrial Waste Conference, for delegates who can combine attendance with their holidays. A ladies program has also been finalized.

Any questions or problems with regard to the conference should be directed to the committee secretary, Len Tobias, at 365-6961 in Toronto.

20 Years Of Key Management

Donald J. Collins Is Appointed New Chairman Of OWRC

Donald J. Collins—following 20 years of key management responsibilities in the Civil Service — was recently appointed chairman of the Ontario Water Resources Commission.

He succeeds Dr. James A. Vance who retired late in March.

Chairman of the Civil Service Commission of Ontario and deputy minister of the Department of Civil Service,

prior to his OWRC appointment, Mr. Collins joined the government in 1949 as personnel assistant in the Civil Service Commission, rising to chief classification officer.

In 1954 he was promoted to the position of executive assistant to Prime Minister Leslie Frost and served on three select committees as secretary.

As deputy minister of the Department of Highways

from 1957 to 1960, Mr. Collins was responsible for the development of policies relating to highway practices.

In addition to reporting to Premier Frost and latterly, Premier Robarts, he has reported to James N. Allan, Matthew Dymond, John Yaremko, and C. S. MacNaughton, ministers of the cabinet and has been closely associated with the overall formulation of government policies.

On announcing the appointment of Mr. Collins, the Prime Minister stated: "His knowledge and experience will further strengthen the Commission in its new and expanded role of involving the people of Ontario more fully in the decision-making process which will result in greater protection and enhancement of our environment."



Donald J. Collins



Watertalk

Published bi-monthly by the Ontario Water Resources Commission
Public Relations and Information, 135 St. Clair Ave. W., Toronto 195,
Ontario for those interested in the many facets of water management.
Reproduction of articles authorized without further permission.

Editor: L. A. Marshall
Director of Public Relations: M. F. Cheetham

An Area Of Conflict

Should the head of an industry be responsible to the citizen or to the shareholder?

This is an area of conflict, occasionally revealed by irate executives attempting to stall the installation of anti-pollution devices because the cost will eat into profits.

BROADER RESPONSIBILITY

In most instances, company representatives should, of course, be responsible to shareholders. But in areas of vital, national significance such as pollution control, the normal business ethic must be discarded and a broader outlook adopted. To continue to pollute and destroy the environment because it is economically profitable for a few would be both unrealistic and unfair.

No one, it should be pointed out, gains more from natural resources than the industrialist. It stands to reason, then, that industry should devote a proportion of its earnings to recovery and protection of the environment.

A FAIR SHARE

A percentage of the income of every taxpayer goes for waste treatment. There is no reason why industry should be exempt from such cost. By reverting part of its income to pollution abatement, industry is doing no more than its share. Ontario, fortunately, has not found it necessary to pursue a policy of force in order to implement pollution control in industry.

GENERALLY CO-OPERATIVE

Ontario companies have, in fact, generally shown themselves quite willing to co-operate in achieving water quality objectives. Where necessary, programs for the installation of pollution devices on a gradual basis have been worked out with the Ontario Water Resources Commission.

The Commission, though, is firmly opposed to the selfish approach which ignores the interests of the citizens of the province. All Ontario plants will be brought up to OWRC standards in time.

The industrial executive has a dual responsibility—to the company and the community.

Lake Erie: A Long Range Challenge

The Name Of The Game Is Eutrophication — The 'Aging Of The Lake' It Has Been Tremendously Accelerated By Nutrients From Municipal Sources

There has been considerable and justifiable public concern over the pollution problems of Lake Erie in recent years.

A number of physical factors have contributed to make Lake Erie more susceptible than the other Great Lakes to the effects of waste materials. The two most critical features—shallowness and a relatively high temperature—have promoted a process known as eutrophication, characterized by algal blooms and a superabundance of algal growths. Nutrients present in detergents and other municipal waste materials and, to a lesser extent, in the run-off from farmlands have tended to build up—making ideal conditions for the growth of algae. The process has been more color-

fully described as "the premature aging" of the lake.

This over-enrichment of the lake by the municipal waste treatment systems is by far the most serious problem in Lake Erie. On the Ontario side, pollution from industry has gradually been eradicated until it is now almost non-existent and certainly a minimal factor in

the water quality problems of the lake.

There has been considerable success, too, in implementing municipal waste treatment. All municipalities discharging to Lake Erie now have treatment plants in operation. Ontario wastes discharging to the Detroit River and contributing to the waste load on the Lake Erie will be greatly reduced with the opening of the Windsor sewage treatment plant this year.

NUTRIENT EXPERIMENTS

None of the current treatment plants, however, are specifically designed to facilitate a high degree of nutrient removal.

It has been recognized that there is no simple solution to the problem of overfertilization and that it will have to be considered a long range challenge. Presently, data on the magnitude of nutrient sources is being compiled as a primary step in coming to grips with the problem. In experimental activities, attempts are being made to develop practical methods for a high degree of nutrient removal from municipal wastes and for the control of nutrients from farm-lands.

TWO-PRONGED ATTACK

Ontario's pollution abatement activities on Lake Erie take the form of a two-pronged attack. First, conditions are continually assessed on either



SURVEY CRAFT MONITORS Detroit River flowing into Lake Erie. Municipal wastes entering the Detroit from the Windsor area will be greatly reduced with the opening of the Windsor sewage treatment plant this year.



Above: Divers, technicians and engineers prepare to install monitoring apparatus off Nanticoke near site of hydro station, now under construction, and proposed steel processing complex. Right: Measuring and recording apparatus is prepared for installation.

a local or regional basis. Programs for improvement and protection of these areas are developed and implemented from these studies.

Some of these regional investigations are major studies in themselves. An intensive study of the waste flow pattern in the entire Grand River Basin—Lake Erie's largest

Surveys of the Lake Erie quality will continue, even after recommendations have been implemented, to ensure that the desired effect is being achieved.

FORECAST EFFECTS

It should be pointed out that part of Ontario's present water quality philosophy is to

more recently, waste treatment, the danger of bacterial infection has become non-existent.

The main objective on the lake, then, must be to arrest the enrichment phenomena—the only aspect of pollution that currently is not under control. To achieve this will undoubtedly mean the introduction of even more costly waste treatment facilities.

The eutrophication problem will be arrested only through the intensive research into more effective treatment now in progress, and public support for the necessary remedial measures.



Washington Meeting

Lake Erie was high on the agenda of items discussed at a recent meeting of the International Joint Commission in Washington.

The meeting was attended by D. J. Collins, chairman of the Ontario Water Resources Commission, and OWRC general manager, D. S. Caverly, as well as representatives of the states bordering the Great Lakes.

The delegates were reporting on studies to be used by IJC in its advisory program.

Discussions on Lake Erie indicated that all jurisdictions will co-operate in studying the problems of nutrient removal from municipal waste discharges into both the lake and the rivers above the lake.

tributary—will be completed this year. The findings will provide a foundation for the development of a tailored-to-measure policy for water quality control in the river and will undoubtedly have a beneficial effect on the water quality of Lake Erie.

This appraisal of conditions in the Grand, with a view to developing an overall water quality program for the river, could be said to be a parallel, on a minor scale, to the second phase of the province's pollution abatement activities on Lake Erie.

JOINT STUDIES

Since 1965, Ontario has participated with U.S. and Canadian agencies in studies to define the conditions in the lake and to develop specific programs for water quality management. A detailed report, outlining practicable remedial measures and their probable costs, will be presented to the International Joint Commission this year.

try to forecast the effects of anticipated wastes, and to implement the necessary measures to ensure the suitability of the lake waters for a wide range of uses. An operation of this nature is currently in progress at Nanticoke, on Lake Erie, at the site of a thermal generating station and a proposed steel processing complex. The intensive studies being conducted at this location will allow a prediction of the effects of the proposed developments and the incorporation of necessary safeguards in the wastewater treatment facilities.

NO HEALTH HAZARD

How has the discharge of waste materials into Lake Erie affected its use as a municipal water supply? Undoubtedly it has, generally, forced the adoption of water treatment techniques. However, the lack of large communities on the northern shore of the lake has always tended to make the danger of infection from bacteria minimal. With the development of adequate water treatment techniques and,



COMPACT NEW submersible measuring and recording device is easily attached to monopod via a pulley-like apparatus.

Support Structure Developed By Commission Engineers ...



TORONTO SKYLINE in background, Commission technicians prepare to tow monopod to water quality testing site. Monopod can be transferred from site to site in less than a day.

It looms some 42 feet into the air—looking like a poorly planned sail boat, missing the boom and sails. Towed behind a small boat, it wallows ponderously in the water. Undoubtedly, its awkward sealines would give a naval architect nightmares.

And yet the new structure, mysteriously dubbed *Monopod*—represents an engineering breakthrough in the design of submersible instrument support structures. Its eccentricities will

greatly simplify the installation of underwater equipment for measuring and recording water quality and movement.

Developed by the Ontario Water Resources Commission, the device is completely portable. While dismantled, it can be transported in a small truck. Towed to the testing site by boat, it is recoverable for use at other locations.

Installation of conventional sub-surface measuring

and recording systems involves the lowering of concrete anchors or frameworks from a crane—equipped barge. Anchor cables, the measuring devices and, in some instances, stabilizing buoys must be affixed under-water by scuba divers. The monopod is anchored by three barrel-like appendages which, when filled with water, dig in to the bottom.

The "barrels" become floats, lifting the entire structure to the surface, when air is forced into them.

... Used In Trial Of New 'Robot'

A recently introduced device has neatly sidestepped the limiting factors of conventional water quality robot monitors.

Robot monitors measure and record parameters of water quality. Monitors currently in use throughout North America are heavy, unwieldy instruments, either supported above water in buoys or towers or "fixed" in semi-permanent shore housings. In both cases, tubes and pumping apparatus are necessary to conduct the water through the monitor for analysis.

Monitors installed above water are "stripped" for compactness, and can measure only a few indicators of water quality. Shore based installations can

only test within a certain range of the shore.

The new measuring and recording unit, designed by the marine systems division of Plessey Co. Ltd., of England, overcomes these problems by functioning underwater. Weighing only 54 pounds, it is completely portable and self-contained. No pump or tubing is necessary. Parameters of water quality are recorded on a computer compatible magnetic tape within the instrument. The device has recently been tested via OWRC's new instrument support structure, the monopod, off the Toronto waterfront.

Cost is \$7,500 as opposed to about \$14,000 for a land-based robot installation.

'Industry Committed To Replacing Phosphorus' Says Soap And Detergent Representative

"Industry is committed to finding a replacement for phosphorus," according to Charles G. Bueltman, vice-president of the U.S. Soap and Detergent Association.

Phosphorus, an ingredient in detergents, is closely associated with the development of algal conditions in some lakes.

Speaking on the eutrophication problem in a recent address to OWRC staff

at the Commission laboratory, Mr. Bueltman emphasized "there wouldn't be any hesitancy" on the part of industry to switch to an alternative to phosphorus if one is found.

He noted that "like any recipe, algal bloom can be controlled by some dependent element."

He cautioned, though, against taking for granted the finding of a phosphorus substitute, pointing out that the magnitude of the problem might necessitate years of research.

Also chairman of the U.S. Joint Industry - Government Task Force—originated by the Federal Water Pollution Control Administration in 1967, Mr. Bueltman traced the accomplishments of the group.

To date the task force has established a "eutrophication information centre" at the University of Wisconsin and has initiated research into a standardized procedure to measure the algal growth potential of various chemicals and waters.



VICE-PRESIDENT of Soap and Detergent Association, Charles G. Bueltman, addresses Commission staff at OWRC laboratories.



FINISHING TOUCHES are put to new OWRC film 'Teamwork' by (l. to r.) Andy Paul, Hans Eijssenck and Mike Wallace, Commission photographic staff. The film will be about 22 minutes in length and is expected to be available for distribution by early summer. It is the third entirely produced by OWRC staff.

Number Of Pump-out Locations Continues To Grow

In response to a continuing OWRC survey, 114 marina operators have now indicated they will provide pump-out service during the coming boating season.

An up-to-date chart, showing the pump-out locations in Ontario and States bordering the Great Lakes will be published by OWRC early in the boating season.

Meanwhile, the commission continues to provide technical information to marina operators interested in installing equipment.

Material describing the

various types of pump-out equipment is available as well as a list of the manufacturers.

OWRC personnel working "in the field" have been giving personal attention to the queries and problems of various marina operators.

The operators are installing the equipment in anticipation of demand for such facilities by boaters as the result of legislation which went into effect last January, making holding tanks or incinerating devices mandatory on boats with sleeping accommodations.



PUMP-OUT locations throughout Ontario are on increase.

New President Elected At OMWA Meeting

New president of the Ontario Municipal Water Association is R. B. Leslie of Leamington. Mr. Leslie was elected at OMWA's third annual meeting, held in Toronto recently.

Highlight of the meeting was a speech on the positive aspects of regional government by R. W. Speck, Mayor of Mississauga. Speaking in favour of "modernized municipal governments", Mr. Speck pointed out that this could make for more viable economic units. He cautioned, though, that with such expansion protection must be ensured for undeveloped areas such as farmlands.

Other items on the agenda included a panel discussion—on regional government—the

keynote theme of the meeting — and a discussion on "What Industry is Doing to

Control Pollution" by Dofasco and Domtar representatives.

For Control Of Aquatic Nuisance

185 Chemical Permits Issued In '68

A total of 185 permits authorizing the use of chemical measures for the control of aquatic nuisance were issued by OWRC in 1968.

The figure represents an increase of 36% over the 136 permits authorized in 1967 and brings to 688 the total number of permits issued since legislation was enacted in 1962.

The majority of permits

issued in 1968 provided authorization for treatments in the forest districts of Kemptonville, Lindsay and Lake Simcoe.

A pamphlet entitled "What to do about weeds in your lake" was prepared and distributed by OWRC to notify private individuals of the existence of the permit system and the availability of technical information pertaining to the use of aquatic pesticides.



News Round-up

- Agreements for sewage works programs, executed recently, include projects at the town of Carleton Place, and the villages of Arthur and Chesterville. Total cost of the three projects is estimated at over \$1,600,000.

Plans call for the construction of a 1.2 mgd activated sludge sewage treatment plant at Carleton Place. The programs at Arthur and Chesterville call for collector sewer and treatment work construction. The three projects are being financed via a provincial plan under which the municipalities pay for service on a use basis only.

- The Fifth Rudolfs Research Conference will be held at Rutgers University, in New Jersey, from June 30 to July 2 this year.

Theme of the conference will be "Origin, Distribution, Transport, and Fate of Organic Compounds in Organic Environment."

The three-day period will be divided into seven sessions to facilitate in depth consideration of the various topics.

Further information can be obtained from Roger Locandro, assistant director of Rutgers' College of Agriculture and Environmental Science, New Brunswick, New Jersey.

- Tenders were closed by OWRC this month for the development of a 55-foot survey vessel.

In the near future the commission hopes to utilize faster, more versatile vessels in its investigations of the Great Lakes.

To date, tugs have been the backbone of Great Lakes operations.



Special Filtration Workshop

PAUL FOLEY, supervisor of the technical advisory services branch of OWRC explains "jar test" to water treatment personnel at special purification workshop held recently at the Westley Filtration Plant in New Toronto. The workshop—third of a series conducted under auspices of the Commission—provided a review of basic principles of water treatment as well as training. Commission water works supervisor, A. B. Redekopp chaired the workshop.

Final Touches Put To Film On 'Teamwork'

Final editing work is being completed by OWRC photographic staff on a new documentary which will bring to a total of eight the number of films available through OWRC.

PARTNERSHIP THEME

The film—"Teamwork"—has as its underlying theme the necessity of co-operation and co-ordination between the various aspects of society and the Commission in order to combat pollution and ensure an abundant supply of fresh water.

ORDER IN NATURE

To illustrate this point the film depicts the order and co-ordination in nature as well as showing how man can accomplish tasks much more effectively through the utilization of teamwork.

Success through teamwork is shown to be effective on all levels—in government, indus-

try and in the schools. Pollution is shown to result as a lack of the teamwork that comes from effective planning.

DESCRIBES HISTORY

As well as describing the history of water management in Ontario, and the reason for establishing OWRC, the film depicts the role of the individual and the various segments of society in the control of pollution.

AVAILABLE BY SUMMER

Initial work on 'Teamwork' commenced last October. It is expected to be available to the public by summer. It is the third film entirely produced and directed by OWRC staff. Running time will be about 22 minutes.

To get a complete list of the films available from the Commission contact OWRC Public Relations and Information, 135 St. Clair W., Toronto.

Nature And Man

Towards

A

Conservation

'Ethic'

In the past decade there has been an increased public awareness of the deleterious affects of industrial-urban activities on the environment.

Few people today, if any, question the need for control of pollution, though there is still considerable controversy over what funds should be allocated for preservation of nature.

The controversy, however, is gradually shifting in favour of a full scale no-holds-barred attack on pollution throughout North America as greater numbers of people become aware of the com-

plexity and risks inherent in environmental problems.

What is needed in conjunction with this approach is an overall plan—an 'environmental ethic'—that will base our activities and expansion on a harmony with nature.

To date, the expansion of the North American society has been, from an environmental point of view, inadequately controlled. Though there is now a general awareness of the dangers of pollution and an increasing readiness to provide funds for pollution combat, industrial-urban expansion still takes precedence over

measures to ensure adequate protection of the environment. This puts us in the position of a man continuously losing a race. Pollution control is perpetually outflanked by industrial development and mushrooming population.

Obviously, a race like this cannot go on forever.

Uncontrolled expansion for the sake of expansion must come to end. Future activities of both industry and the community must be based on what the effects will be to the environment.

In the long run this will mean a higher standard of living for everybody.

OWRC 'Blues'?

Sprinklers' 'Gradual Build-up' Plan Loses Steam In Semi-finals

OWRC Sprinkler coach Jim Stasiuk's policy of "gradually building steam" fizzled out as the team suffered a fatal drubbing at the hands (or sticks) of Club 55 in the semi-finals of the Queens Park Hockey League.

Right up to the semi-finals Stasiuk had high hopes that his team would gradually gain momentum and, ultimately, achieve victory.

However, the death knell was sounded when the Sprinklers entered the playoffs in third place instead of second, according to Stasiuk's plan. This meant that

the team had to pit itself against the first place Club 55 instead of the fourth place Trans-Canada Pipeline team.

The Sprinklers lost both games in the two game, total points series (by scores of 4-2 and 7-4) to wind up in third place in the final standings, behind Club 55 and Customs.

Part of the trouble, said Stasiuk, was that several of the team's best players left in mid-season to continue university studies. Hopefully, he added, this misfortune won't recur next year.

Stasiuk also revealed that next year he plans to change the name of the team. (*Sprinklers* has never really been the official name of the team and, in fact, may originally have been thought of as a joke.)

The name currently under consideration is *The Blues*.

One cynical observer has already commented that, in view of the team's present status, the name may have a double meaning.



A BLUE COACH, Jim Stasiuk, sanitary engineering, contemplates changing name of OWRC Sprinklers to OWRC Blues. His team lost out in semi-finals to Club 55, winding up in third place, behind Club 55 and Customs.



Directors' Meeting:

SENIOR MANAGEMENT of the Commission held a three-day meeting recently to review the Commission's operations for the past year and to discuss a program for the ensuing year. Above, management is shown outside of the Guild Inn in Scarborough where the meeting was held.

Ground Water Pollution

Report Stresses Need For Geological Studies

Pollution of underground water supplies as a result of population and industrial build-up can be avoided through an awareness of geological factors, according to a report in the April edition of *Ground Water*, the journal of the U.S. National Water Well Association.

The report, prepared by James H. Williams, chief geologist of the Missouri Geological Survey, stresses

the need for planning in the disposal of wastes, particularly with regard to location.

It documents pollution problems that have occurred in Missouri as a result of failing to take into account geological features of the land, pointing out that "the source and subsurface conditions that have created a tremendous catchment for sub-surface water supply in southern Missouri will just as easily create catchments for surface pollution."

The report also notes "the natural incentive" to put money first and waste disposal second—"Thus we receive requests as to where the lagoon site should be located for town 'X's' factory after the factory has been built in an area of sinkholes."

A major recommendation of the report is that the physical features in a developing area be documented in text and map form as the first essential step in avoiding ground water pollution.



Left: Dr. Vance accepts gift from staff at farewell luncheon held at the Park Plaza Hotel in Toronto. Below: New chairman D. J. Collins compliments Dr. Vance (shown with Mrs. Vance) on his years of distinguished service.



Premier Robarts Expresses Personal Appreciation

Associated With Commission Since Formation Dr. James A. Vance Retires

Dr. James A. Vance, chairman of the Ontario Water Resources Commission since 1964, retired late in March. Dr. Vance had been associated with the Commission since its inception in 1956 and was also a member of the Water Resources and Supply Committee which preceded the establishment of OWRC.

Dr. Vance was born in Oxford county and presently resides in Woodstock, Ontario. He studied civil engi-

neering at the University of Toronto and in 1941, on the death of his father, assumed direction of the family's construction company in Woodstock. He is a past-president of the Engineering Institute of Canada, a member of the Engineering Advisory Committee of the University of Western Ontario, and a member of the American Society of Civil Engineers. He has also served as Ontario director of the Chamber of Commerce and as chairman of the Canadian Forestry Association.

In public service he has sat on several hospital boards in Woodstock and London and is a past-president of the Oxford County Tuberculosis Association.

In 1959 he received an honorary degree, Doctor of Laws from the University of Western Ontario.

TECHNICAL DEVELOPMENT

In announcing Dr. Vance's retirement to the members of the Ontario Legislature on Friday, March 28th, the Hon. John Robarts, Prime Minister of Ontario, stated that the retiring chairman "has guided the development of the technical staff of the Ontario Water Resources Commission to a position where it is recognized as one of the most advanced groups in its field today. Under his chairmanship, OWRC has achieved spectacular results in the field of water supply and pollution abatement. The beneficial effect of Dr. Vance's work as chairman of the Commission will have a continuing and salutary in-

fluence on the lives of the people of Ontario for many years to come."

The Prime Minister expressed his personal appreciation to Dr. Vance for the advice he had given to the government and assured him on behalf of the House that "we will continue the important work for which you have laid so sound a foundation."

MEMBER OF COMMITTEE

Dr. Vance was a member of the Ontario Water Resources Committee prior to being appointed a Commissioner in 1956. It was that year the OWRC was set up by the Ontario government on the recommendation of the committee which had carried out an intensive investigation of Ontario's water supplies.

Dr. Vance took over as chairman in 1964 just as the Ontario Water Resources Commission was embarking upon a new phase of its diversified program concerned with the development, utilization, treatment and management of water resources and the provision of adequate pollution control measures in Ontario. The new undertaking involved the building and operation of water pipelines with Ontario Government funds in areas where the supply was indicated to be inadequate.

The new chairman of the Ontario Water Resources Commission is Donald J. Collins, who has been chairman of the Civil Service Commission and Deputy Minister of the Department of Civil Service.



After The Fair

IT LOOKS EMPTY NOW but OWRC's compact new display was the site of busy activity at the opening of the Tobacco Growers' Equipment and Supply Trade Fair at Tillsonburg on April 9. The display was the first at which the Commission's new Watercare theme was used. Commission representatives supplied information on the use of water for irrigation and on the permit system governing water withdrawals.



Water management in Ontario

Watertalk

VOL. 2, NO. 3

MAY, 1969



SPECIAL FEATURES AND EMPLOYEE NEWS



Information Manual Now Available To Industry

An information manual containing the working documents normally used by OWRC in dealing with industries in the province has been prepared by the Commission's division of industrial wastes.

The manual will serve a very useful purpose in ac-

quainting those persons or firms that are developing a waste treatment application for the first time with the procedures and requirements of OWRC. It will be particularly useful to industries planning to locate in the province.

Included in the information is a brief outlining in general terms OWRC's in-

dustrial policy, program and procedures.

A copy of the Ontario Water Resources Commission Act as well as the recently prepared booklet *Industrial Pollution Control in Municipalities* is also included.

The manual is available through OWRC's division of industrial wastes.